

ZOOLOGY.—*Teredo* (*Nototeredo*) *nambudalaiensis*, a new shipworm from the Madras coast of India.<sup>1</sup> N. BALAKRISHNAN NAIR and O. N. GURUMANI, Alagappa College, South India. (Communicated by C. H. Page.)

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While engaged in a study of the teredine fauna of the South Indian coast, 19 species of shipworms belonging to the genera *Teredo* and *Bankia* were collected, identified, and described (1-4). Of these, 13 were found to be new to science. Roonwal (5) recorded the occurrence of the genus *Bactronophorus* from the Sunderbans in the 24 Pargana Districts in Bengal.

This communication deals with one more new shipworm, *Teredo* (*Nototeredo*) *nambudalaiensis*, of which several shells and pallets were collected from a huge log of wood (timber undetermined) washed ashore at Nambudalai (Ramnad District), East Coast, during the monsoon times in January 1956.

*Measurements*.—Shell length 6.5 mm, shell height 7 mm, pallet length 12 mm, stalk 6 mm, blade 6 mm, diameter of the blade 2 mm.

*Characters*.—Shell of moderate size. The anterior lobe, anterior median lobe, and a part of the middle median lobe with an olive-green hue; the rest of the shell white. The anterior lobe with a fairly deep sinus at its anterior margin covered with a thin callus reflected over the exterior. The rest of the anterior part is marked by fairly strong riblike dental ridges numbering not less than 66. These ridges are more closely approximated at the anterior callus than at their junction with the median part where the spaces that separate them are more than twice the width of the dental ridges. The dental ridges are slightly wider at the umbone than at the ventral margins. These ridges bear numerous minute, closely spaced denticles on their outer dorsal margin, which give them a serrated appearance. The angle formed at the junction of the anterior part with the anterior median part at its ventral margin is obtuse. The anterior and posterior portions of the median lobe are convex, while the middle median portion is slightly concave. The

anterior median is narrower than the posterior median and marked by closely crowded dental ridges numbering not less than 82. These ridges bear strong closely crowded tubercles and the ridges are separated by deeply impressed lines. In the type specimen many of the tubercles toward the umbonal side are worn out. The middle and posterior median parts are marked by the enfeebled extensions of the dental ridges of the anterior area. The posterior portion forms a moderately large auricle marked by incremental lines.

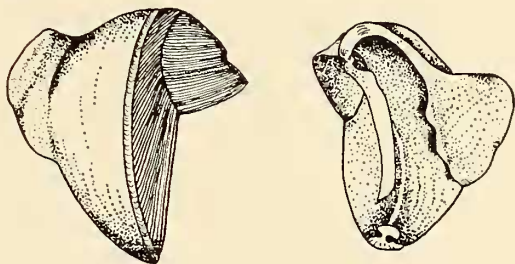


FIG. 1.—Shell of *Teredo* (*Nototeredo*) *nambudalaiensis*, n. sp.: Left, outer view; right, inner view.

The interior is pearly white. The umbones form a strong knob from the inner under side of which the sickle shaped and fairly broad blade curves across, about two-thirds the inside of the shell toward the ventral knob, which is quite strong in this form. The junction of the anterior lobe with the median is in the form of a threadlike ridge, and the posterior portion extends over the median on the inside as a narrow shelf.

The pallet is elongated and cricket-bat shaped. It is not cupped distally. The blade is flat and its external surface is slightly convex showing longitudinal groove distally for about half the length of the blade. The stalk insensibly merges with the blade and extends as a tumid ridge to the tip of the blade on its inner aspect.

*Remarks*.—Of the three genera *Teredo*, *Bankia*, and *Bactronophorus*, which constitute the family Teredimidae, the present form belongs to the genus *Teredo* Linnaeus (1758), since the pallets

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are paddle shaped. The genus includes about 12 subgenera. The form before us comes under the subgenus *Nototeredo* by virtue of the following features: The posterior part of the shell is so attached to the posterior median part as to form a decided shelf projecting inward. Further, the pallet is elongated and flattened, with no cupping at the extremities, appearing somewhat like a cricket bat. This subgenus was established in 1923 by Bartsch (6) on the basis of the form *Teredo (Nototeredo) edax* Hedley.

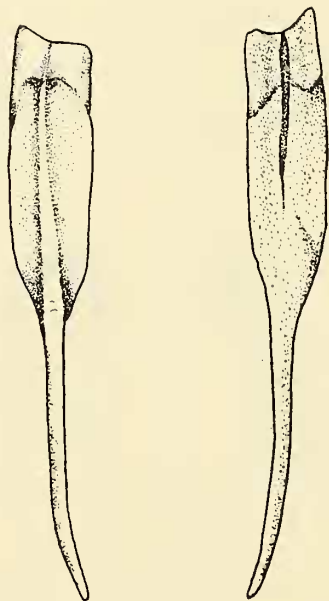


FIG. 2.—Pallet of *Teredo (Nototeredo) nambudalaiensis*, n. sp.: Left, inner view; right, outer view.

A comparative study of the characters of the two species included under this subgenus suggests that the present form does not belong to either of them. However, it shows some resemblance to *Teredo (Nototeredo) edax* Hedley in having an elongated cricket-bat shaped pallet which is not cupped distally, but differs from it in the nature of the stalk, which is almost as long

as the blade. Further, *Teredo (Nototeredo) edax* is reported as having “curious growth corrugations covering most of the outer surface and the tips of the inner surface” (7). Moreover, a detailed study of both the pallet and the shell shows that the form before us is one hitherto undescribed and hence to be treated as a species new to science, ***Teredo (Nototeredo) nambudalaiensis***, defined as follows:

*Teredo* with a distinctly paddle-shaped pallet with an elongated blade, not cupped distally, which is a little concave on its inner surface and convex on its outer aspect and marked by a longitudinal groove extending for less than half of the blade at its distal aspect, with a stalk which is almost the length of the blade, cylindrical and tapering, merging insensibly with matrix of the blade and extending to the tip of the latter as a tumid ridge on the inner surface.

A shell whose height is slightly more than its length, with a moderately well developed auricle, which forms a narrow shelf projecting into the median portions and having a sickle shaped and broad blade extending for about two-thirds the distance from the umbone to the ventral knob. The type will be deposited in the Zoological Survey of India, Calcutta.

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*In framing hypotheses we must see that they agree with facts; in other respects they may be as inconceivable (not self-contradictory) as any fairy tale.*  
—M. M. P. MUIR.